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ABSTRACT

The Options Program, a vocational program using applied academic courses at the Greene County Career Center in Ohio, was evaluated in 1989-90. Objectives measured were program enrollment, job placement of graduates, and postsecondary education of graduates. Data were gathered by comparing the enrollment, placement statistics, and percentage enrolled in postsecondary education since implementation of the Options Program in 1985-86 with the statistics of completers of the previous 4 years. The study found that the number of seniors enrolled decreased slightly following implementation of the Options Program. The percentage of completers employed in related jobs showed an increasing trend following program implementation. The percentage of graduates enrolled in postsecondary education showed significant increases from 1987-88 to 1989-90. The study indicates that the Options Program is succeeding in preparing students for employment in their related areas and in preparing students for continuing education. The study concluded that the Options Program should be continued and expanded to other vocational areas beyond the accounting and computer areas that have been implemented. (13 references) (KC)

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ED334356

EVALUATION OF THE APPLIED ACADEMICS OPTIONS PROGRAM FOR BUSINESS STUDENTS OF GREENE COUNTY CAREER CENTER

MASTER'S PROJECT

Submitted to the School of Education
University of Dayton, in Partial Fulfillment
of the Requirements for the Degree
Master of Science in Education

by

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CHAPTER I

INTRODUCTION TO THE STUDY

Significance of the Study

A 1984 report from the National Commission on Secondary Vocational Education, "The Unfinished Agenda," recommended that every high school student experience a curricula which balances both academic and vocational education (Lotto, 1985). This trend to include more academic education along with vocational preparation and vice versa resulted in the implementation of a pilot program called the "Options Program" in August, 1985, among vocational business students at Greene County Career Center, an Ohio joint vocational school. This Options Program (see definition of terms) replaced the traditional vocational program (see definition of terms) in two career preparation programs: Data Accounting and Banking (DAB) and Computer Information Systems (CIS).

While the Options Program has been in existence at Greene County Career Center for the past five school years, 1985-86 to 1989-90, there has been no formal evaluation of the program. In addition to the two areas mentioned, two other business areas and several trade and industrial areas have also converted to the Options Program during the past five years. One purpose for converting to the Options Program is

to promote enrollment by providing students with more "options" upon graduation. In addition to working full-time in their chosen trade areas, graduates would have the educational background to work part-time and enroll part-time in postsecondary education or enroll in postsecondary education full-time. Thus vocational enrollment would be increased because the vocational program will not only appeal to vocationally-oriented students, but also to those students who wish to pursue postsecondary education. Another goal of the Options Program was to provide more well-rounded students to employers, thus increasing job placement among vocational graduates. The program would also provide those students who begin working immediately with the background to more readily benefit from continuing education to update skills at a later date or to continue education for its own sake.

According to Greene County Career Center administration, there have been few programs of this type implemented to date. Those that have been started have had little formal evaluative information documented. This particular study was needed in order to determine if this type program is meeting its intended goals and should be continued and implemented among additional vocational areas at this vocational school, or whether another approach should be pursued. This study provides documented formal evaluation of this type of program and provides input for other vocational schools which may need to revise programs to reflect the

recommendations of "The Unfinished Agenda."

Problem Statement

The purpose of this project was to evaluate the "Options Program" of two vocational business programs with regard to selected objectives: program enrollment, job placement, and postsecondary education of graduates. These objectives were chosen to be evaluated because they were the three major objectives upon program implementation.

Definition of Terms

Applied Academic Course. An applied academic course (such as Applied Math or Technical Writing and Communications) is one which is correlated with a particular vocational trade area. Such courses are taught by teachers certified in the appropriate academic areas (math, English, science, etc.) so students receive academic credit for the coursework while learning the material as it applies to students' areas of vocational interest.

Computer Information Systems Program. The Computer Information Systems Program (CIS) is a two-year vocational business program in which students train to become data entry operators, computer operators, etc. (Previously entitled Data Processing.)

Data Accounting and Banking Program. The Data Accounting and Banking Program (DAB) is a two-year vocational business program in which students train to become manual and/or automated bookkeepers, account clerks, etc. (Previously entitled Account Clerk; Data Accounting and Computing.)

Joint Vocational School. A joint vocational school is a two-year secondary school for eleventh and twelfth grade students from member high schools in the area in which the vocational school is located. Students enroll in a particular vocational trade area program for two consecutive years.

Options Program. The Options program is a manner of setting up vocational study in which eleventh grade students spend two and a half hours in a laboratory setting, one class

period in a related class (Accounting I, Data Processing, etc.), one class period in an applied mathematics class, one class period in an applied office procedures or other related class, and one class period in a traditional English class. Twelfth grade students spend two and a half hours in the laboratory, one period in a related class, one period in employability skills, one period in Applied English (Technical Writing and Communications), and one class in traditional history/government. As set up at GCCC, the vocational teacher teaches both junior and senior laboratories, and the other classes are taught by teachers certified in the appropriate academic areas. Applied and related courses are correlated with the laboratory teacher. (See program outline below.)

Traditional Vocational Program. In a traditional vocational program, a three-hour laboratory and two related classes are taught by the junior vocational teacher plus students take a traditional English class during the junior year. In the senior year, a three-hour laboratory and two related classes are taught by the senior vocational teacher plus students take a traditional history/government class. (See program outline below.)

TRADITIONAL PROGRAM COURSEWORK

JUNIOR YEAR

3 hour laboratory (taught by vocational instructor)
2 periods related instruction (taught by same vocational instructor)
1 period English

SENIOR YEAR

3 hour laboratory (taught by vocational instructor)
2 periods related instruction (taught by same vocational instructor)
1 period government/history

OPTIONS PROGRAM COURSEWORK

JUNIOR YEAR

2 1/2 hour laboratory (taught by vocational instructor)
1 period applied math (correlated with lab; taught by certified math instructor)
2 periods related instruction (taught by business instructor)
1 period English (not correlated)

SENIOR YEAR

2 1/2 hour laboratory (taught by vocational instructor)
1 period applied technical writing and communication (correlated with lab; taught by certified English instructor)
1 period history/government (not correlated)

CHAPTER II

REVIEW OF RELATED LITERATURE

Secondary education in the United States has been moving toward requiring additional academic courses for graduation including mathematics, science, and English since 1983 (Lotto, 1985). In order to integrate this trend into vocational education, plus attract college-bound students in addition to students interested solely in vocational training, and provide businesses with employees who possess a broader knowledge base and good problem-solving skills, Ohio has prepared curriculum materials and financial incentives for vocational school districts to integrate math, science, and communication skills into vocational education courses (Frantz, 1988). Greene County Career Center (GCCC) integrated math and communication skills with the Data Accounting and Banking (DAB) and Computer Information Systems (CIS) Programs in 1985. By integrating these skills with the vocational programs, GCCC has been able to use cross-credit for comparable courses to provide students with an additional English credit and an additional math credit to meet more rigorous graduation requirements and provide enough credits for college-bound students to continue their education (Silberman, 1988). In order for students to receive these credits, teachers certified in math and English teach the correlated courses of Business Math and Technical

Writing and Communication (Rose, 1988). This integration also demonstrates the equality of importance of general academic and vocational education (Lotto, 1985).

A similar program was adopted by Dauphin County Technical School (DCTS) in Pennsylvania in 1984 (Polto, 1988). This school's administration believed that academic subjects related to students' vocational interests would be more readily received by vocational students. According to DCTS, students' math scores have gone up and reading scores have stopped declining since implementation of the program. DCTS also reports that students, teachers, and employers have been enthusiastic about the program, and the progrm "responds well" to the recommendations of The Unfinished Agenda (Polto, 1988). DCTS also points out that students are enthusiastic about the related academic courses because they are directly related to their chosen vocational programs, and they can see the applicability of skills to real-life situations and use the skills immediately in the lab situation (Polto, 1988). This relationship between related academics and vocational programs can also help prevent dropouts, an additional benefit of the integrated academics concept (Weber, 1987).

Since 1983, vocational enrollment in over half the states has either not increased at the same rate as the high school population or has decreased faster than the number of high school students (Frantz, 1988). The long-term trend in vocational enrollment is decreasing numbers of students; rapid

decreases in enrollment have been occuring since 1982 (Lewis, 1988). Part of this decline is due to increased competition among vocational programs and traditional programs, stiffening of high school graduation requirements, and students' views that there is less value in vocational education than academic education (Lewis, 1988; Frantz, 1988). It is a goal of the GCCC options program to provide graduation credits for related academics and enable students to view vocational education as valuable by allowing students the options of continuing education or obtaining technical employment after completing vocational programs. There was a need to determine if enrollments have in fact increased as they have in similar programs at Pioneer Joint Vocational School in Ohio by looking at enrollment trends within the options program (Rose, 1988).

Employers are demanding workers with more mathematics, science, and English skills to compete in industry (Rose, 1988). The future work force needs vocational program graduates with improved basic skills (Dronka, 1988). Employers also desire workers with the "ability to learn and to solve problems" (Buck, 1987). In addition to improved basic skills, employers also need workers with more specialized training and the ability to update that training via continuing education due to rapidly changing technology (Frantz, 1988). A goal of academic and vocational integration as is done in the GCCC options program is to produce employees who are better able to benefit their companies and "progress

in their chosen field of work" (Polto, 1988). Even by the year 2000, "Eighty percent of all jobs will not require a four-year degree;" therefore, appropriate vocational training for potential employees is vital (Niebla, 1987). It was necessary to determine if the GCCC options program is providing graduates with skills that enable them to be placed in and keep related job positions.

Vocational education is not only valuable to vocationally-oriented students, but it is also valuable to college-bound students because it enables them to develop problem-solving skills by applying concepts and principles (Frantz, 1988). These benefits of vocational education are frequently overlooked by college-bound students; the options program may be viewed by all students as more beneficial if the vocational and academic programs are more closely related (National, 1988). Forty-four percent of all 1980 high school graduates did not enroll in post-secondary education (Frantz, 1988). These students could have been well-served by the options program which would have allowed them to obtain vocational training and basic skills for entry-level positions in the work force. In addition, students who opt to pursue a vocational program to enable them to begin working after graduation should not be denied the opportunity to earn bachelor-level degrees later in life (Lotto, 1985). A third goal of the GCCC options program is to provide this opportunity for continuing education to both vocationally-

oriented and college-bound students. In order to determine if the program is achieving this goal, the number of students enrolled in college after graduation from the options program needed to be determined.

The literature available states that today's high school students need better basic skills plus updated technological training to enable them to pursue either careers or college after graduation. Students need better basic skills; vocational schools need to improve enrollment; employers need workers with training and thinking skills; and all students deserve the opportunity to enroll in continuing education if they so desire. The GCCC options program seeks to realize all these goals. In order to determine if the program is actually realizing these goals, the options program needed to be evaluated. This study compares enrollment, job placement, and enrollment in college by graduates before and after implementation of the options program to evaluate the program's effectiveness in the areas of increasing enrollment, placing graduates in related job positions, and providing graduates with the educational background to enroll in postsecondary education, all of which help the vocational student achieve the goals of "The Unfinished Agenda."

CHAPTER III

PROCEDURE

The purpose of this project was to evalute the "Options Program" of two vocational business programs with regard to selected objectives: program enrollment, job placement, and postsecondary education of graduates. This evaluation was done by comparing the enrollment, placement statistics, and percentage enrolled in postsecondary education since implementation of the Options Program (1985-86 to present) with the statistics of completers of the previous four years (1981-82 to 1984-85).

Subjects

The subjects of this project were senior students enrolled in the Data Accounting and Banking (DAB) or Computer Information Systems (CIS) Programs between the 1981-82 and 1989-90 school years.

Setting

School Setting. The school used in this project was the Greene County Career Center (GCCC), an Ohio joint vocational school which draws its students from eleventh and twelfth grade classes of seven school districts in Greene County. It is a two-year vocational school. Following are the districts

from which GCCC draws its students: Beavercreek High School is located in the city of Beavercreek, population approximately 37,000; Bellbrook High School is located in the town of Bellbrook; Cedarville High School is located in the village of Cedarville; Fairborn High School is located in the city of Fairborn, population approximately 30,000; Greeneview High School is located in the rural town of Jamestown, population approximately 5,000; Xenia High School is located in the city of Xenia, population approximately 25,000; and Yellow Springs High School is located in the village of Yellow Springs, population approximately 4,200.

Community Setting. Greene County, Ohio, has a population of about 130,000. Xenia is the 430 square mile county's seat. There are five institutions of higher learning in Greene County: Antioch College, Cedarville College, Central State University, Wilberforce University, and Wright State University. Wright Patterson Air Force Base is also located in the county and is the county's largest employer.

Data Collected

Enrollment Figures. Senior enrollment figures for the DAB and CIS programs were obtained from the placement office of Greene County Career Center for the school years 1981-82 to 1988-89. Senior enrollment figures for the year 1989-90

were obtained from laboratory instructors of the DAB and CIS programs. The number of students enrolled before implementation of the Options Program (1981-82 to 1984-85) and after implementation (1985-86 to 1989-90) were compared.

Follow-up Statistics. Follow-up statistics for students who completed their GCCC educations between 1981-82 and 1988-89 were obtained from the GCCC Placement Office. One year after graduation each student who was enrolled in a vocational program is contacted to determine if that former student is working full- or part-time in a job related or not-related to his/her vocational preparation area, attending college, has entered the military, is seeking work, or is not in the work force. These are the records that were used to determine the number of former DAB and CIS students working and/or attending college for school years 1981-82 to 1988-89. The number of seniors in the 1989-90 year working in related fields was obtained from advanced placement records in the GCCC placement office. The number of 1989-90 seniors planning to attend college was obtained from a survey on the current number of students planning to attend college kept by the GCCC placement office.

CHAPTER IV

FINDINGS

The first objective studied with regard to the implementation of the Options Program at GCCC was enrollment. The following figures depict the number of senior students enrolled in the CIS and DAB Programs (combined) at GCCC. Figure 1 depicts the four years prior to implementation (1981-82 to 1984-85), and the second figure depicts the five years since implementation (1985-86 to 1989-90).

The enrollment figures do not indicate an increase in enrollment following implementation of the Options Program; nor do they indicate a significant decrease in enrollment following implementation. The decrease in numbers between 1985-1989 may be due to the lower numbers of students enrolled in the home schools as indicated by related literature studies (Frantz, 1988; Lewis, 1988).

Figure 1

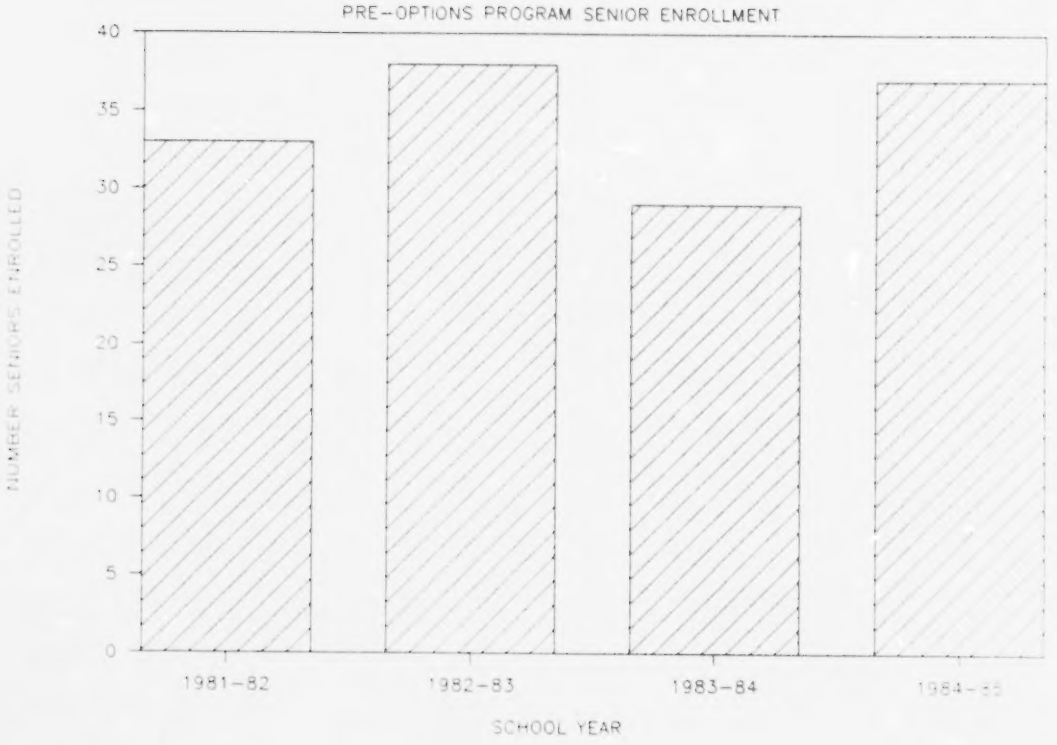
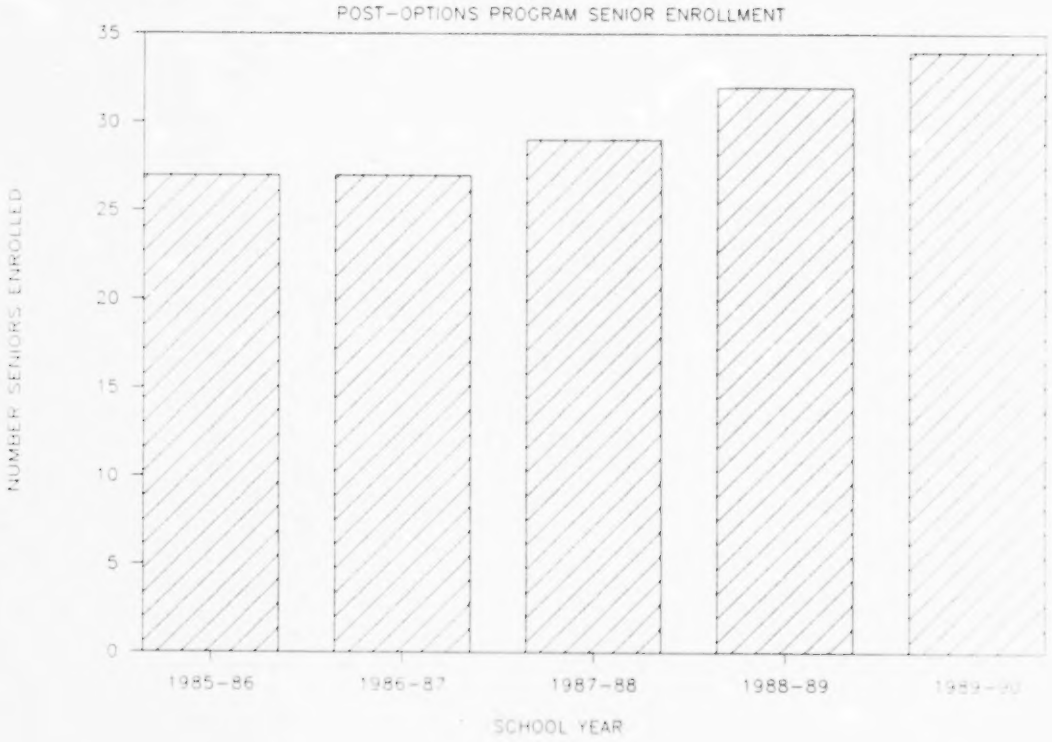

PRE-OPTIONS PROGRAM SENIOR ENROLLMENT
NUMBER SENIORS ENROLLED
40
35
30
25
20
15
10
5
0
1981-82
1982-83
1983-84
1984-85
SCHOOL YEAR

Figure 2


POST-OPTIONS PROGRAM SENIOR ENROLLMENT
NUMBER SENIORS ENROLLED
35
30
25
20
15
10
5
0
1985-86
1986-87
1987-88
1988-89
SCHOOL YEAR

The second goal of the Options Program was to provide better-prepared employees to the business community, thus increasing the job placement rate of graduates of the Options Program. The number of graduates employed in jobs related to the fields they studied in the DAB or CIS Programs is shown in the Figures 3 and 4.

The percentage of students employed in related fields shows an increase following implementation of the Options Program in 1985-86.

The third objective evaluated was the number of completers who pursued postsecondary education. The percentage of graduates of the CIS and DAB Programs at GCCC enrolled in postsecondary education before and after implementation of the Options Program is indicated in Figures 5 and 6.

Although there is a three-year decrease in the percentage of graduates attending postsecondary education between 1984-85 and 1986-87, 1987-88 to 1989-90 shows a more significant increase in the percentage of DAB and CIS graduates enrolled in postsecondary education.

Figure 3

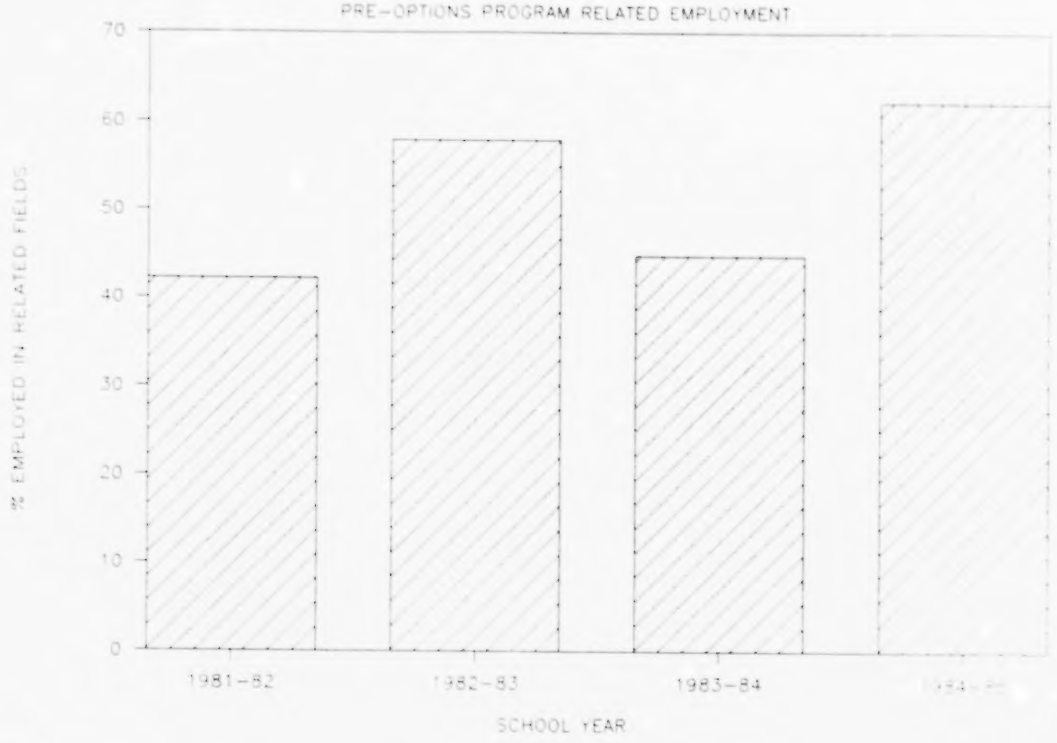

PRE-OPTIONS PROGRAM RELATED EMPLOYMENT
% EMPLOYED IN RELATED FIELDS
70
60
50
40
30
20
10
0
1981-82
1982-83
1983-84
SCHOOL YEAR

Figure 4

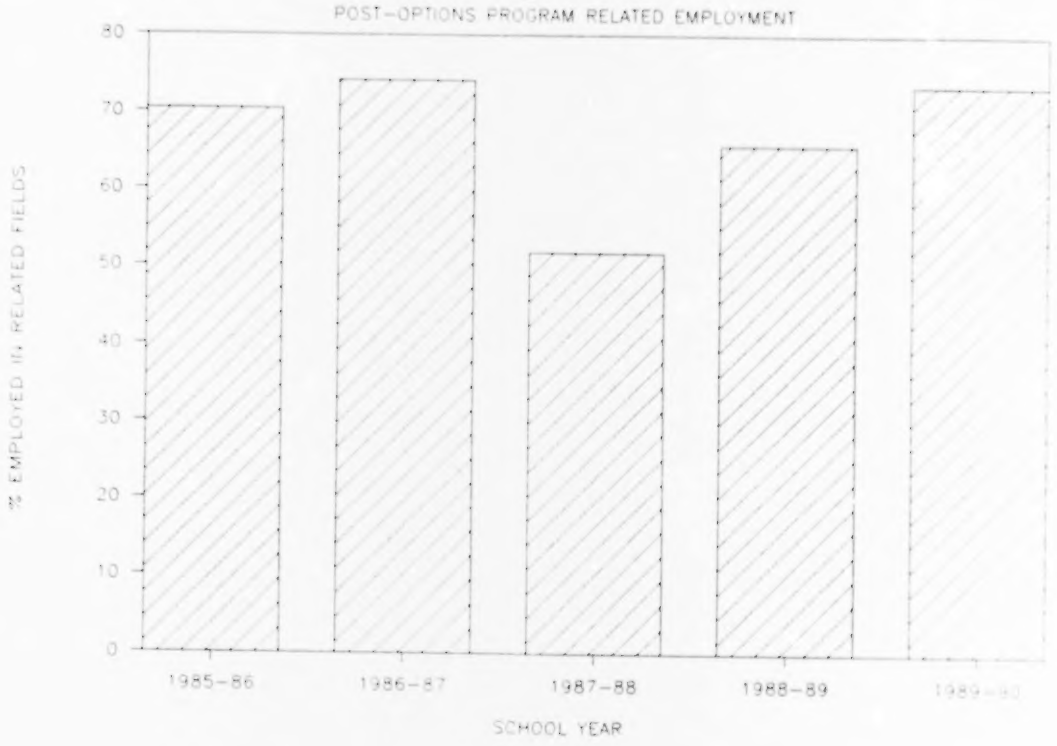

POST-OPTIONS PROGRAM RELATED EMPLOYMENT
% EMPLOYED IN RELATED FIELDS
80
70
60
50
40
30
20
10
0
1985-86
1986-87
1987-88
1988-89
1989-90
SCHOOL YEAR

Figure 5

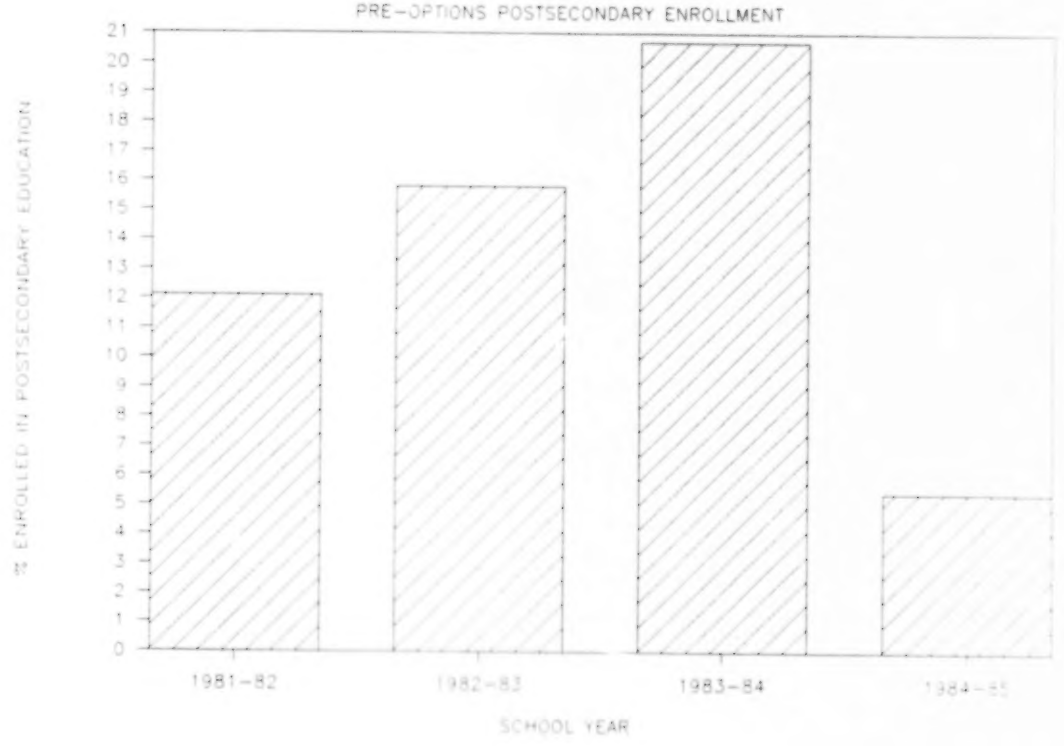
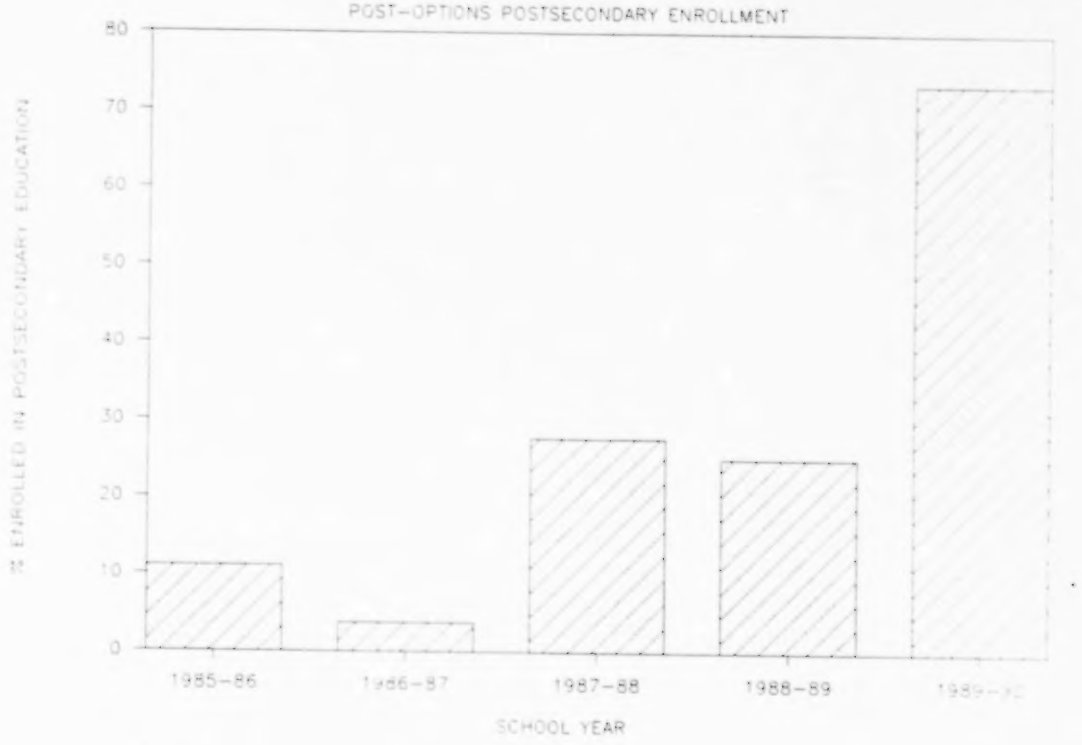

PRE-OPTIONS POSTSECONDARY ENROLLMENT
% ENROLLED IN POSTSECONDARY EDUCATION
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
1981-82
1982-83
1983-84
1984-85
SCHOOL YEAR

Figure 6


POST-OPTIONS POSTSECONDARY ENROLLMENT
% ENROLLED IN POSTSECONDARY EDUCATION
80
70
60
50
40
30
20
10
0
1985-86
1986-87
1987-88
1988-89
SCHOOL YEAR

CHAPTER V

SUMMARY, CONCLUSIONS, RECOMMENDATIONS

Summary

The Options Program, a vocational program utilizing applied academic courses, was implemented in the Data Accounting and Banking (DAB) and Computer Information Systems (CIS) Programs at Greene County Career Center (GCCC) in 1985-86. Three major goals of the program were to increase enrollment, increase employment of seniors and graduates by improving their qualifications in basic skills as related to their employment areas, and to provide graduates with credits needed to pursue postsecondary education if desired. The purpose of this project was to evaluate the Options Program of these two vocational business programs with regard to selected objectives: program enrollment, job placement of graduates, and postsecondary education of graduates. The number of seniors enrolled in the program decreased slightly following implementation of the Options Program in 1985-86. The percentage of completers employed in related jobs showed an increasing trend following program implementation. The percentage of graduates enrolled in postsecondary education showed significant increases from 1987-88 to 1989-90.

This study indicates that the Options Program is succeeding in preparing students for employment in their

related areas. This study also indicates that the Options Program is preparing students for continuing education. This study indicates that the Options Program should be continued in the business programs studied and should also be implemented in other vocational areas as well.

Conclusions

Three major goals of the Options Program were increased enrollment, improved and increased job placement, and increased enrollment in postsecondary education. This researcher concludes that the Options Program is meeting its goals in two of these three areas, and may be meeting the third goal to a certain degree.

The Options Program is providing students with a stronger basic education background via the applied academic courses, thus making those students more valuable to employers. This in turn has increased the percentage of students employed in related fields of employment as indicated by the results of the study.

The Options Program is providing students with appropriate credits to allow them to continue their education at the postsecondary level by allowing them to earn an additional English and an additional mathematics credit, as well as improving their basic education skills. This conclusion is supported by the large percentage of graduates from 1987-88 to 1989-90 enrolled in postsecondary education.

Although the number of students enrolled did not increase following implementation, and in fact slightly decreased immediately following implementation, the researcher concludes that there are many other factors involved in lowering enrollment and that the Options Program may be keeping enrollment from becoming even lower. First, there have been lower enrollments in the home high school districts from which GCCC draws its students. There are also other factors, such as revised GCCC entrance requirements which are stricter than they were prior to implementation of the Options Program and expansion of programs at some home schools which are also attractive to students. While enrollment has decreased since 1985-86, the Options Program has drawn students to the program who planned to attend college following graduation. These students previously would not have considered the vocational business programs due to the fact that they would not have the high school credits required by many colleges and universities. The Options Program has also attracted students who were uncertain as to whether or not they wanted to pursue postsecondary education by providing them with a skill for employment plus the background needed to continue education if they so desired.

It is the conclusion of this researcher that the Options Program utilizing applied academic courses is meeting its intended goals of increased employment of students and enabling graduates to continue education at the postsecondary

level. The Options Program is also drawing a more diverse group of students than before implementation and may be keeping enrollment at a level that would otherwise be much lower; however, it is not meeting its goal of increasing enrollment.

Recommendations

During the course of this study the researcher had the opportunity to compile many statistics concerning the enrollment, job placement, and postsecondary education with regard to the Options Program. The researcher also had the opportunity to speak with teachers involved in the daily application of the Options Program and students enrolled in the Options Program, and the researcher also heard from several former students previously enrolled in the Options Program. Based on the results of the study coupled with comments of teachers, students, and graduates, the researcher offers the following recommendations concerning the Options Program.

The researcher recommends the continued use of applied academics in the Options Program for the business areas studied, plus implementation of the program in additional business vocational programs. The use of applied academic courses should be implemented in all vocational programs feasible, particularly in light of the trend toward increasing general education requirements. The concept of applied

academics is a very viable and appropriate way for vocational programs to meet these requirements and enhance their curricula.

The vast majority of students and graduates of the Options Program contacted had very positive comments regarding the applied academics courses and indicated that this basic education has been valuable in employment and in enabling them to update their knowledge and skills via continuing education.

Teachers involved in the Options Program also made positive comments concerning the effects of the program. They observed increased awareness among students of the applicability of basic skills to their vocational areas, and have been able to incorporate additional correlated activities in the laboratory. Teachers have been pleased with the placement rates of classes since implementation of the Options Program as well as the follow-up statistics regarding postsecondary education.

There are, however, a few concerns regarding the Options Program that must be addressed. With the Options Program schedule set up as it is at GCCC (see Definition of Terms) there is very little time for laboratory instructors to correlate with the related teachers. There is also less time in the laboratory than there was in the traditional program schedule (see Definition of Terms), yet students are expected to develop the same basic skills as before in addition to new technology as it becomes available. It would be preferable

for vocational teachers to teach the two related classes and the laboratory for one year (junior or senior) in order to eliminate the need for correlation time between the related instructor and the laboratory instructor. This would also provide an additional class period for the vocational teacher to correlate/team-teach in the applied academics class in which his/her students were participants, not to mention allowing the vocational teacher to provide lecture information to students in the classroom setting thus leaving additional "hands on" time while in the laboratory.

Overall, the Options Program is successful in meeting its goals. Job placement and postsecondary education of graduates have shown increases since the implementation of the program. The program should be implemented in some form in all vocational schools, bearing in mind the concerns voiced previously concerning the scheduling and set up of such a program. The implementation of applied academics and correlation among all teachers involved will take vocational programs a long way toward meeting the recommendations of "The Unfinished Agenda."

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